



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: ) Confirmation No. 1290  
Mark Guy Trowbridge ) Docket No. DN1999119USA  
For: AIR SPRING UPPER RETAINER ) Art Unit: 3683  
Serial No.: 10/009,695 )  
Filed: November 6, 2001 )  
Assistant Commissioner for Patents  
Washington, D.C. 20231

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DECLARATION UNDER 37 C.F.R. 1.131

I, Mark Guy Trowbridge, declare that I am a citizen of the United States of America, and I am currently employed by The Goodyear Tire & Rubber Company as a senior development engineer. I have worked for Goodyear for over 20 years. I graduated from the University of Akron with a BS in Mechanical Engineering.

I am the inventor of the present invention described and claimed in the current application. The invention is directed to a retainer for an air spring. The goal of the invention was to provide a lightweight alternative to a conventional retainer plate that also permitted direct mounting of the air spring onto the suspension frame, resisted corrosion and provided a simplified means of plumbing the pressurized fluid.

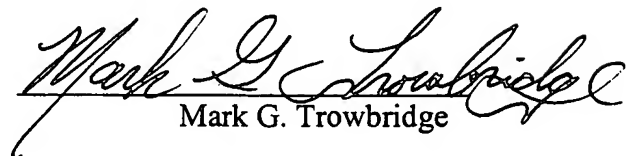
I conceived of the idea on or before September 3, 1997 with the original concept captured in a hand sketch. The first drawing, including some strength calculations, is dated January 28, 1998 and the idea was then memorialized in a Goodyear invention disclosure (see Exhibit 1), signed by myself on February 2, 1998. A signed copy of the original retainer design drawing was submitted with the disclosure. The invention disclosure was received in the Goodyear Patent Department on March 2, 1998 and assigned to Attorney Krawczyk.

Field inspection of numerous truck configurations revealed that the proposed reinforcing ribbing (which projected above the mounting interface plane) would interfere with some components on select vehicles. Learning that the reinforcement of the retainer must not exceed the envelope typically allocated for the air spring, a revised approach was brought forth having the entire retainer ribbing structure reconfigured to be below the mounting surface plane as shown in my computer file for this revision (identified in Exhibit 2) and having a file creation date of May 27, 1998.

The complete redesign for the retainer configuration is shown in Exhibit 3. In accordance with the latest design, prototypes were prepared. Testing of the prototypes continued through out the remainder of 1998 and into 1999 to ensure that the weight, strength and durability requirements were achieved. The favorable results indicated that pursuit of permanent mold tooling would be advisable.

The redesigned retainer structure was disclosed to Attorney Krawczyk during a January 1999 meeting and in the following months, the patent application was prepared and filed. At no time, from the conception of the original design (September 1997) to the patent application filing (May 1999), was the original goal of a corrosion resistant, lightweight retainer that is easy to install and plumb ever abandoned or withdrawn from active work by myself or the applicable Goodyear management.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the subject United States patent application (Serial Number 10/009,695).

  
Mark G. Trowbridge

Date: MAY 10, 2004